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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/823,462	04/12/2004	William S. Lovell	PAP01USA	4595
27626	7590	01/17/2006	EXAMINER	
WILLIAM S. LOVELL 6435 N. E. NEPTUNE DR. LINCOLN CITY, OR 97367			PHAM, MINH CHAU THI	
			ART UNIT	PAPER NUMBER
			1724	
DATE MAILED: 01/17/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/823,462

Applicant(s)

LOVELL, WILLIAM S.

Examiner

Minh-Chau T. Pham

Art Unit

1724

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 30 November 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-20, 22 and 23 is/are allowed.
- 6) ☒ Claim(s) 21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

***Claim Rejections - 35 USC § 103***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ricci (5,165,295), in view of either Smissen et al (4,277,443) or Jones (4,530,706), and further in view of Forsgreen et al (5,063,926).

Ricci discloses a self powered wearable personal air purifier (1) having a main frame, an air conduit disposed in a longitudinal direction along the main frame having an inlet and an outlet (see Figs. 1 & 4), a power source (6) and body attaching means (4) wherein the air purifier is removably attachable to a user (see col. 2, lines 25-29, col. 2, line 42 through col. 3, line 29, col. 4, lines 4-21). Ricci further discloses air baffle disposed transversely in the main frame of the purifier (see Fig. 3). Claim 21 differs from the disclosure of Ricci in that the personal air purifier has a filter disposed in the air conduit. Smissen et al disclose layers of filtration media in a purifying apparatus including a dust filter (19), a filtering material for cleaning the air stream such as potassium peroxide, etc. (see col. 3, line 45 through col. 4, line 50). Jones discloses a filter cartridge for a purifying apparatus filled with an adsorbent (16) such as activated carbon (col. 2, lines 25-26) or molecular sieves (col. 3, lines 31-35). Forsgreen et al disclose a respirator required in a wide range of industrial environments including chemicals, nuclear and biomedical facilities wherein the respirators include high efficiency particulate air media HEPA capable of filtering out at least 99.97% of the particulates from the air stream (col. 1, lines 12-26, col. 3, lines 11-16, lines 21-25 and

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lines 40-52). It would have been obvious to a person having ordinary skill in the art at the time the invention was made to provide various filtering layers as taught by either Smissen et al or Jones and an HEPA filter as taught by Forsgreen et al in the purifier of Ricci since different filtration layers would help to clean out certain specific contaminant and particulates in the air stream passing therethrough.

***Allowable Subject Matter***

Claims 1-20, 22 and 23 allowed.

The following is an examiner's statement of reasons for allowance: None of the prior arts discloses a wearable personal air purifier having an air blocking sheet disposed over the air conduit in forced contact wherein an inward pressure is applied to the air blocking sheet by the stretching of the air blocking sheet over a set of walls surrounding the air conduit.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

***Response to Amendment***

Applicant's arguments filed on November 30, 2005 have been fully considered but they are not persuasive.

Applicant amended independent claim 21 and argues that none of the prior arts discloses an HEPA filter in a wearable personal air purifier. The Examiner maintains Ricci (5,165,295), Smissen et al (4,277,443) and Jones (4,530,706) as the primary and

secondary references under the 103 rejection, and further introduces Forsgreen et al (5,063,926) as the tertiary reference to show: Forsgreen et al disclose a respirator required in a wide range of industrial environments including chemicals, nuclear and biomedical facilities wherein the respirators include high efficiency particulate air media HEPA capable of filtering out at least 99.97% of the particulates from the air stream (col. 1, lines 12-26, col. 3, lines 11-16, lines 21-25 and lines 40-52), as claimed. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to provide various filtering layers as taught by either Smissen et al or Jones and an HEPA filter as taught by Forsgreen et al in the purifier of Ricci since different filtration layers would help to clean out certain specific contaminant and particulates in the air stream passing therethrough.

Claims 1-20, 22 and 23 allowed, as indicated above.

Applicant's arguments with respect to claim 21 has been thoroughly considered but are moot in view of the new ground(s) of rejection, as discussed above.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Minh-Chau T. Pham whose telephone number is (571) 272-1163. The examiner can normally be reached on Mon/Tues/Thur/Fri 7:00 am - 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duane Smith can be reached on (571) 272-1166. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



**Minh-Chau Pham**  
**Patent Examiner**  
**Art Unit: 1724**  
**January 10, 2006**